

DOCUMENT RESUME

ED 359 896

HE 026 594

AUTHOR Wright, Virginia B.; And Others  
 TITLE Education and Job Satisfaction: Are Baccalaureate Nurses More Satisfied with Their Jobs?  
 PUB DATE [91]  
 NOTE 17p.  
 PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS \*Associate Degrees; \*Bachelors Degrees; Flexible Working Hours; Higher Education; \*Job Satisfaction; \*Nurses; Nursing Education; Outcomes of Education; Quality of Working Life; Surveys; Work Environment  
 IDENTIFIERS Nurse Associates

ABSTRACT

A study was done to learn about relative job satisfaction among nurses with baccalaureate degrees compared to nurses with associate nursing degrees. A job satisfaction survey was mailed in the summer of 1988 to a selected sample of 480 nursing graduates of a regional southeastern university. Seventy-two baccalaureate and 50 associate degree nurses responded. Each group had average work experience of about 8 years. Baccalaureate nurses gave significantly higher satisfaction ratings for 8 of the 20 job aspects studied, including job security, fringe benefits, hours that fit with lifestyle, interaction with supervisor, respect among ranks, status, self-esteem from job, and help and supplies. When these respondents were subdivided into smaller groups based on work setting, job responsibility, hours worked, work experience, and graduation year, the higher satisfaction ratings of baccalaureate nurses persisted. The results also showed work-related differences between groups: a much higher proportion of the associates group was working in hospitals, 84 percent compared with 66 percent. More of the baccalaureate nurses were not primarily responsible for direct patient care, 40 percent versus 22 percent. On average, baccalaureate nurses working full-time earned about \$4,000 more than associates. The findings of higher salaries and greater job satisfaction for the baccalaureate group supports the economic concept of investment in human capital. Contains 19 references. (JB)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

ED359896

Education and Job Satisfaction:  
Are Baccalaureate Nurses More  
Satisfied with Their Jobs?

by  
Virginia B. Wright, Joan McGill and Janet M. Collins

Abstract

Theoretical and empirical literature in nursing and economics provides a mixed picture of possible differences between experienced baccalaureate and associate nurses. There is also little research on relative job satisfaction of these two groups, and no general support for differences. Given interest in the relative merits of these two nursing degrees as well as the importance of nursing job satisfaction, particularly in the context of efforts to reduce health care costs and reform the health care system, the purpose of this study was to learn more about relative job satisfaction for the two groups.

A job satisfaction survey was mailed in the summer of 1988 to a systematically selected sample of graduates of a regional southeastern university. Reported here are responses from 72 baccalaureate and 50 associate nurses. Each group had average work experience of about 8 years. Baccalaureate nurses gave significantly higher satisfaction ratings for 8 of the 20 job aspects studied, including: job security, fringe benefits, hours that fit with lifestyle, interaction with supervisor, respect among ranks, status, self-esteem from job, and help and supplies. When these respondents were subdivided into smaller groups based on work setting, job responsibility, hours worked, work experience, and graduation year, the higher satisfaction ratings of baccalaureate nurses persisted.

BEST COPY AVAILABLE

PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

Virginia B. Wright

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

AE026594

EDUCATION AND JOB SATISFACTION:  
ARE BACCALAUREATE NURSES MORE  
SATISFIED WITH THEIR JOBS?

by

Virginia B. Wright, Joan McGill and Janet M. Collins\*

In 1965, the American Nurses' Association (ANA) proposed that the baccalaureate (BS) degree in nursing become minimum preparation for professional nursing practice, and associate degree (AD) education provide minimum preparation for technical nursing practice (American Nurses' Association [ANA], 1965). This proposal was based on assumptions that nursing would continue to be a vital part of the expanding health care team, and that the constant explosion of scientific knowledge would require increased depth and breadth in nurses' educational preparation. Since ANA's position paper, many efforts have been directed toward differentiating the two levels of nursing (American Association of Colleges of Nursing, 1986; ANA, 1985; Commission on Nursing Education, 1980; Council of Associate Degree Programs, 1990).

Although there is considerable agreement among nursing professionals on educational and theoretical differences between professional and technical nursing, implementation of these differences in the workplace has been slow as employers have not generally hired, paid, utilized, or evaluated nurses according to educational preparation. Experience since graduation has been cited as a better measure of ability to perform (Reichow & Scott, 1976) and as a better indicator of career advancement (Link, 1987) than educational preparation. Soules (1978) found that nurses were paid and promoted on the basis of seniority, not education, but that 25% of BS nurses and 3% of AD nurses were in head nurse or managerial positions. Differences in utilization of the nursing process have been found, based on educational background (Gray, Murray, Roy, & Sawyer, 1977; Johnston, 1982), but their impact in the workplace is not clear. Gray and colleagues (1977) suggested that differences based on educational preparation will not be identified unless nurses are evaluated differently on the job. Overall, findings are consistent with the ANA Social Policy Statement of 1980 which acknowledged that both BS and AD programs produce generalists, and that differences in nursing practice result from experience and individual competence as well as level of education.

In a review of research on nursing job satisfaction, Hinshaw and Atwood (1983) found no consensus for a single theoretical model likely to predict nursing job satisfaction. Education was one of several likely determinants, along with age, experience, position in the organizational hierarchy (i.e., status, autonomy, pay) and environmental

\* Virginia B. Wright, PhD, is Professor of Economics, Eastern Kentucky University, Richmond, KY. Joan McGill, RN, DSN, is Chair, Division of Nursing, Queens College, Charlotte, NC. Janet M. Collins, RN, DSN, is Director of Continuing Education, College of Allied Health and Nursing, Eastern Kentucky University, Richmond, KY. The authors gratefully acknowledge the editorial assistance of Anne Abrams, RN, MSN, and research support from Eastern Kentucky University.

factors (i.e., type of unit, supervision and interpersonal relationships). Studies of recent graduates (Munro, 1983; Stewart-Dedmon, 1988; Weisman, Dear, Alexander, & Chase, 1981) and experienced nurses (Weisman et al., 1981) have generally found no differences in job satisfaction based on educational preparation. Weisman and colleagues (1981) suggested that work environment might be a more important variable in job satisfaction than educational preparation.

The only extensive study of experienced nurses with different educational backgrounds was conducted by the National League for Nursing in the late 1960s and 1970s (Knopf, 1983). After 15 years the majority of nurses, regardless of educational preparation, received personal satisfaction from their work. However only half were satisfied with salaries and working conditions. Ten years after graduation 65% of AD nurses and 62% of BS nurses working were working full-time in nursing; 28% of AD nurses and 35% of BS nurses were not working at all. Most newly graduated nurses from all programs worked in hospitals as staff nurses. These numbers declined for all graduates over the years, with BS nurses leaving hospitals more quickly and in larger proportions. Knopf found that after 15 years of full-time work, more AD nurses were staff nurses, head nurses, and supervisors than were BS nurses. More BS nurses were in teaching, administrative, and extended roles. When nurses were asked if they would choose nursing and the same program again, 43% of AD nurses and over 60% of BS nurses said they would. While 25% of the AD nurses said they would choose nursing but a different program, only 1% of the BS nurses said this.

Economists view resources used in education as investments in human capital. These investments are expected to provide future returns, most often in the form of higher future incomes. Nationally and for all age groups in 1979, a woman with 4 years of college earned about \$2,000 more annually than a woman with 1 to 3 years of college (Bureau of the Census, 1984). Using regression analysis of national data for 1984, Link (1987) found a differential of about \$1,400 attributable to a BSN over an ADN education, given years of work experience. In 1987 the average annual salary of beginning AD graduates was \$22,201, while that of BS graduates was \$23,161 (BHP, 1990).

Link also studied the possibility that an additional two years of investment in a BS degree would result in future returns in the form of higher nursing positions. He found, however, that career paths of BS and AD nurses were very similar. With 15 years of work experience, both groups were about equally likely to become head nurses (7.4% for BS and 7.8% for AD nurses), nurse specialists (8.1% and 8.9%, respectively), or administrators (12% and 14%, respectively). This study could not distinguish between positions in small and large hospitals.

Investments in education are also expected to provide qualitative returns such as greater productivity and more meaningful lives. These returns for a BS above an AD degree may not be readily apparent or easily measurable in nursing practice. Although a broader liberal arts education is theoretically designed to prepare more productive and responsible citizens, it is difficult to determine the extent to which any degree ultimately affects a nurse's professional and personal life. The studies of relative job satisfaction and types of positions held by AD and BS nurses, reviewed in the earlier section on nursing perspectives, deal with qualitative factors that economists would include as possible returns to investments in nursing education.

## PURPOSE

Theoretical and empirical literature in nursing and economics provides a mixed picture of possible differences between experienced AD and BS nurses. There is also little research on relative job satisfaction of these two groups. Given interest in the relative merits of these two nursing degrees as well as the importance of nursing job satisfaction, particularly in the context of efforts to reduce health care costs and reform the health care system, the purpose of this study was to learn more about relative job satisfaction for the two groups.

## METHOD

### Instrument

To measure job satisfaction, an instrument was constructed using components identified by earlier studies and several other previously developed instruments. Some slight rewording of items from previous nursing studies was necessary because our instrument was also used in a companion study of relative job satisfaction of baccalaureate nurses, elementary teachers, and accountants. Our instrument contains 2 general statements about overall job satisfaction and security and 18 specific statements related to pay, working conditions, social interaction, autonomy, professional status, task requirements, and administration (Wright, McGill, & Collins, 1990).

Each respondent was instructed to assign two ratings on a Likert scale (from 1 to 5) for each of the statements (randomly arranged). The first rating indicated agreement or disagreement relative to the respondent's current job. A rating of 5 indicated strong agreement, and therefore high job satisfaction; a rating of 1 indicated strong disagreement, and therefore low job satisfaction. The second rating indicated the importance placed on that factor in choosing a job. A rating of 5 indicated the factor was very important; a rating of 1 indicated it was not very important.

Both satisfaction and importance ratings were included in consideration of possible associations between importance and satisfaction. Larson, Lee, Brown, and Schorr (1984) found nurses more likely to be satisfied with job factors on which they placed high importance. Satisfaction for their study was measured as the extent to which a nurses' own expectations for a factor had been met in the 6 months after being hired by a university hospital. Using regression analysis of questionnaire responses from 60 nurses, Larson and colleagues found 56% of the variation in satisfaction ratings associated with importance ratings.

In addition to job satisfaction statements, our instrument included a set of questions about earlier educational choices. Nurses were asked if they would pick the same major and degree if they had to choose again. These questions were included so that possible linkages between job satisfaction and satisfaction with earlier nursing education could be explored.

Our instrument was pretested for clarity with registered nurses attending continuing education workshops in the spring of 1988. No

validity or reliability testing specific to this instrument was undertaken prior to using the instrument in this study.

### Procedures

This instrument was mailed in the summer of 1988 to a systematically selected sample of graduates from a regional southeastern university. Selected was every  $x$ th graduate from lists, by degree and in zip code order, obtained from the university's alumni association. The sample included 480 nursing graduates, 240 from the AD program and 240 from the BS program. All had graduated between 1974 and 1983, and so had had the opportunity for 5 to 15 years of work experience since graduation. To encourage responses, two third-class mailings were followed by a final first-class mailing. Response rates were 29% for AD graduates and 36% for BS graduates. These were viewed as acceptable, considering the length of time since graduation.

Only responding nurses who reported currently working in jobs related to their nursing degrees were included in this analysis. Excluded were two AD and eight BS nurses not working, a BS nurse working as the director of a crime commission, and a BS nurse working as an office manager for a dentist. Since this study's focus was differences between AD and BS nurses, also excluded were 11 nurses with masters' degrees.

Separate statistics were calculated for 11 nurses initially sampled as AD graduates who later received BS degrees. On the average, these nurses had worked about one year longer than nurses with just an AD degree or a BS degree. Ten of the 11 worked in hospitals, and 5 of the 11 were in positions not primarily responsible for direct patient care (e.g., positions primarily involving supervisory, teaching or administrative tasks). For our analysis, these 11 nurses were classified as BS nurses because they were expected to receive the same benefits from two additional years of nursing education as other BS graduates. A preliminary comparison also showed that satisfaction ratings of these 11 nurses more closely resembled ratings of the BS group. Thus, this study finally included two groups containing 50 AD and 72 BS nurses, respectively.

For the 122 AD and BS nurses included in this study, satisfaction ratings for each of the 18 specific statements and the job security statement were significantly correlated with satisfaction ratings for the general statement ( $p \leq .05$  for Kendall's tau) for all except the busy work statement. This correlation provides support for the validity of our instrument. That is, it indicates that 18 of these 19 statements included in our instrument pertained to factors linked with overall job satisfaction for this group of nurses.

## RESULTS

### Subjects

The AD and BS nurses were similar in many respects (see Table 1). Both groups had an average age of about 33, and all but one in each group were female. Only slightly more of the BS nurses were married, 79% compared with 74%, and had children under 6, 46% to 40%. A

Table 1. Demographic and Work-Related Characteristics of AD and BS Nurses.

| Characteristic                                       | AD Nurses<br>( <u>n</u> = 50) | BS Nurses<br>( <u>n</u> = 72) |
|--|-------------------------------|-------------------------------|
| Average age  | 33.6                          | 32.8                          |
| Female   | 98%                           | 99%                           |
| Married  | 74%                           | 79%                           |
| Children under 6                                     | 40%                           | 46%                           |
| Graduated 1974 - 1978                                | 42%                           | 35%                           |
| Average years worked<br>since degree                 | 7.7                           | 8.1                           |
| Working in hospitals                                 | 84%                           | 66%                           |
| Working full-time                                    | 67%                           | 71%                           |
| Working in state in<br>which graduated               | 76%                           | 75%                           |
| Not primarily responsible<br>for direct patient care | 22%                           | 40%                           |

moderately higher proportion of the AD nurses, 42% compared with 35%, had been early graduates; that is, they had received the degrees for which initially they had been sampled between 1974 and 1978. Both groups had worked an average of about 8 years since receiving these degrees, and about three-fourths of each group were currently working in the state in which these degrees had been received. Two-thirds of the AD nurses and slightly more of the BS nurses (71%) were working full-time.

There were, however, several work-related differences between the two groups (see Table 1). A much higher proportion of the AD group was working in hospitals, 84% compared with 66%. More of the BS nurses were not primarily responsible for direct patient care, 40% as compared to 22%. In both hospital and nonhospital settings, about one-fourth of the AD nurses were in positions not primarily responsible for direct patient care. About one-third of the BS nurses in hospitals and half of those in nonhospital settings were in positions not primarily responsible for direct patient care.

Although three times as many BS nurses worked in nonhospital settings as did AD nurses, nurses from both groups worked in community health, physicians' offices, clinics, and nursing homes. Half of the BS nurses working in nonhospital settings and not primarily responsible for direct patient care worked in educational settings. No AD nurses working in nonhospital settings worked in education. While the two groups had a similar and varied mix of nursing specialties, more BS nurses cited mental health and administration as nursing specialties than did AD nurses.

About 63% of our respondents reported complete salary information. On the average, BS nurses working full-time earned about \$4,000 more than AD nurses (see Table 2). To compare this difference with earlier estimates from the Census Bureau (1984) and Link (1987), conversions to 1988 dollars were made. The Census Bureau estimate of \$2,000 in 1979 became about \$3,250 in 1988; Link's \$1,400 in 1984 converted to about \$1,600 in 1988. Thus this study's \$4,000 differential for all positions was not too far from the Census Bureau estimate, but much larger than Link's.

Some of this study's \$4,000 difference may be attributable to the relatively high proportion of BS nurses not primarily responsible for direct patient care. In hospitals, nurses not primarily in direct care earned, on the average, \$4,600 more than those in direct care. In nonhospital settings the premium for not being in direct care was even larger, about \$9,100. There is, however, some offset to this advantage for BS nurses, since a smaller proportion of BS nurses were working in hospitals. On the average, nurses working in hospitals earned about \$5,200 more than nurses working in nonhospital settings.

#### Importance Ratings

Both AD and BS nurses rated satisfaction with the 20 job factors surveyed as quite important in their job choices (see Table 3). Four statements about hours that fit with lifestyle, opportunity to help others, and self-esteem from the job received importance ratings greater than 4.5 from both groups. Only two statements had mean importance ratings lower than 4.

Table 2.. Average 1988 Salaries of Nurses Working Full-Time

| Nursing Group  | All Work                    |                             | Nonhospital                 |
|--|-----------------------------|-----------------------------|-----------------------------|
|  | Settings                    | Hospitals                   | Settings                    |
| All full-time nurses   | \$27,586<br>( <u>n</u> =76) | \$29,380<br>( <u>n</u> =50) | \$24,135<br>( <u>n</u> =26) |
| AD nurses  | \$24,925<br>( <u>n</u> =28) | \$25,904<br>( <u>n</u> =23) | \$20,420<br>( <u>n</u> =5)  |
| BS nurses  | \$29,138<br>( <u>n</u> =48) | \$32,341<br>( <u>n</u> =27) | \$25,019<br>( <u>n</u> =21) |
| Nurses primarily<br>responsible for<br>direct patient care     | \$24,995<br>( <u>n</u> =42) | \$27,421<br>( <u>n</u> =29) | \$19,585<br>( <u>n</u> =13) |
| Nurses not primarily<br>responsible for direct<br>patient care | \$30,785<br>( <u>n</u> =34) | \$32,086<br>( <u>n</u> =21) | \$28,685<br>( <u>n</u> =13) |

Table 3. Mean Importance Ratings of AD and BS Nurses

| Component &<br>Statement of<br>Job Satisfaction | Mean Importance Rating<br>AD<br>Nurses<br>( <u>n</u> =48) | Mean Importance Rating<br>BS<br>Nurses<br>( <u>n</u> =69) | Significance<br>Level ( <u>p</u> ) for<br>Difference<br>in Means |
|---|---|---|--|
| General   |   |   |  |
| ●General satisfaction                           | 4.50  | 4.67  | .24  |
| ●Job security                                   | 4.70  | 4.58  | .34  |
| Pay   |   |   |  |
| ●Satisfactory salary                            | 4.26  | 4.28  | .93  |
| ●Adequate fringe benefits                       | 4.32  | 4.42  | .53  |
| Physical working conditions                     |   |   |  |
| ●Hours that fit with<br>lifestyle               | 4.61  | 4.78  | .18  |
| ●Control over hours of<br>work                  | 4.46  | 4.59  | .41  |
| Social interaction                              |   |   |  |
| ●Good interaction with<br>supervisor            | 4.32  | 4.47  | .34  |
| ●Respect among ranks                            | 4.40  | 4.55  | .27  |
| ●Opportunity to help<br>others                  | 4.63  | 4.61  | .90  |
| Autonomy  |   |   |  |
| ●Chance for independent<br>thought/action       | 4.42  | 4.43  | .90  |
| ●Opportunity for<br>professional growth         | 4.44  | 4.48  | .78  |
| ●Support for continuing<br>education            | 4.56  | 4.43  | .43  |
| Professional status                             |   |   |  |
| ●Sufficient status                              | 3.88  | 3.96  | .66  |
| ●Self-esteem from job                           | 4.57  | 4.62  | .70  |
| Task requirements                               |   |   |  |
| ●Not too much "busy work"                       | 3.42  | 3.68  | .28  |
| ●Adequate time to get<br>job done               | 4.51  | 4.33  | .24  |
| ●Adequate help and<br>supplies                  | 4.48  | 4.41  | .62  |
| ●Skills fully utilized                          | 4.54  | 4.36  | .19  |
| Administration                                  |   |   |  |
| ●Chance for administra-<br>tive participation   | 4.11  | 4.13  | .89  |
| ●Opportunity for<br>advancement                 | 4.10  | 4.17  | .71  |

Analysis of variance indicated no significant differences between mean importance ratings of AD and BS nurses. The best significance level for any statement was .18, and half of the statements had significance levels above .50 (Table 3). In general, AD and BS nurses viewed these 20 satisfaction factors of similar importance in choosing jobs. Thus it can be concluded that any differences in satisfaction ratings are not likely to be the result of differences in importance placed on these factors by the two groups.

#### Satisfaction Ratings

BS nurses reported higher satisfaction with their current jobs on every statement except skill utilization, and the difference for this statement was very small (see Table 4). Analysis of variance showed significant differences in the mean ratings for these two groups ( $p = .05$  or less) for eight of the statements representing six of the eight job components studied.

For the general satisfaction statement and the eight statements for which BS graduates reported significantly higher satisfaction, additional calculations for subgroups of nurses with specific work-related characteristics were made. This was to see whether significant differences for all nurses continued to be significant in these subgroups. Also, this analysis provided for the possibility that differences between BS and AD nurses might be the result of relationships between educational level and other nurse and environmental characteristics.

Nurses were divided into 10 subgroups based on five characteristics: work setting, job responsibility, hours worked, work experience, and graduation year. Significance levels associated with differences in mean satisfaction ratings for BS and AD nurses within each of these 10 subgroups are shown in Table 5. In every subgroup and for every statement compared, BS nurses had higher satisfaction ratings than AD nurses. There was, however, wide variation in the significance of differences between BS and AD nurse ratings, from one subgroup to another and from one statement to another. For nurses working in hospitals, BS nurses were much more satisfied with status than AD nurses ( $p = <.005$ ), but were not significantly more satisfied with hours that fit with lifestyle ( $p = .49$ ). For nurses not working in hospitals, the reverse was true; BS nurses were significantly more satisfied with hours that fit with lifestyle ( $p = .01$ ), but not with status ( $p = .63$ ).

For each of the 10 subgroups, BS nurses were significantly more satisfied with several specific aspects of their jobs. Significant differences were most numerous for nonhospital nurses, those primarily responsible for direct patient care, and part-time workers. Significant differences were least numerous for hospital nurses, those not primarily responsible for direct patient care, and nurses with more than seven years of experience.

Across the 10 subgroups, the most consistent difference in BS and AD nurse ratings was for fringe benefits. Also relatively frequent were differences in ratings for status and self-esteem, help and supplies, and hours that fit with lifestyle. By contrast, a significant difference in ratings on general satisfaction was present for only one subgroup, graduates not working in hospitals.

Table 4. Mean Job Satisfaction Ratings of AD and BS Nurses

| Component &<br>Statement of<br>Job Satisfaction | Mean Job Satisfaction Rating    |                                 | Significance<br>Level (p) for<br>Difference<br>in Means |
|---|---------------------------------|---------------------------------|---|
|   | AD<br>Nurses<br>( <u>n</u> =50) | BS<br>Nurses<br>( <u>n</u> =72) |   |
| General   |                                 |                                 |   |
| ●General satisfaction                           | 3.60                            | 3.86                            | .15   |
| ●Job security                                   | 3.82                            | 4.21                            | .05   |
| Pay   |                                 |                                 |   |
| ●Satisfactory salary                            | 2.80                            | 3.21                            | .09   |
| ●Adequate fringe benefits                       | 2.69                            | 3.58                            | <.005   |
| Physical working conditions                     |                                 |                                 |   |
| ●Hours that fit with<br>lifestyle               | 3.60                            | 4.08                            | .04   |
| ●Control over hours of<br>work                  | 3.58                            | 3.81                            | .35   |
| Social interaction                              |                                 |                                 |   |
| ●Good interaction with<br>supervisor            | 3.60                            | 4.03                            | .04   |
| ●Respect among ranks                            | 3.32                            | 3.74                            | .05   |
| ●Opportunity to help<br>others                  | 4.46                            | 4.58                            | .40   |
| Autonomy  |                                 |                                 |   |
| ●Chance for independent<br>thought/action       | 3.96                            | 4.29                            | .06   |
| ●Opportunity for<br>professional growth         | 3.48                            | 3.69                            | .34   |
| ●Support for continuing<br>education            | 3.96                            | 4.18                            | .29   |
| Professional status                             |                                 |                                 |   |
| ●Sufficient status                              | 3.40                            | 4.00                            | <.005   |
| ●Self-esteem from job                           | 3.58                            | 4.06                            | .01   |
| Task requirements                               |                                 |                                 |   |
| ●Not too much "busy work"                       | 2.64                            | 2.93                            | .23   |
| ●Adequate time to get<br>job done               | 3.24                            | 3.58                            | .11   |
| ●Adequate help and<br>supplies                  | 3.24                            | 3.79                            | .01   |
| ●Skills fully utilized                          | 3.78                            | 3.72                            | .77   |
| Administration                                  |                                 |                                 |   |
| ●Chance for administra-<br>tive participation   | 2.80                            | 3.21                            | .09   |
| ●Opportunity for<br>advancement                 | 2.98                            | 3.26                            | .25   |

Table 5. Significance Levels (p) for Differences in Job Satisfaction Means of AD and BS Nurses in Work-Related Subgroups

| Statement                          | Work Setting       |                 | Direct Patient Care |            | Time Worked |             | Work Experience |                 | Graduation Year |                |                |
|------------------------------------|--------------------|-----------------|---------------------|------------|-------------|-------------|-----------------|-----------------|-----------------|----------------|----------------|
|                                    | All Nurses (N=122) | Hospital (N=88) | Nonhospital (N=32)  | Yes (N=81) | No (N=40)   | Full (N=83) | Part (N=37)     | ≤7 Years (N=48) | >7Years (N=63)  | 1974-78 (N=40) | 1979-83 (N=71) |
| General                            |                    |                 |                     |            |             |             |                 |                 |                 |                |                |
| ● General satisfaction             | .15                | .36             | .01                 | .22        | .83         | .23         | .38             | .28             | .20             | .12            | .84            |
| ● Job security                     | .05                | .08             | .23                 | .03        | .70         | .20         | .06             | .01             | .40             | .23            | .13            |
| Pay                                |                    |                 |                     |            |             |             |                 |                 |                 |                |                |
| ● Adequate fringe benefits         | <.005              | <.005           | <.005               | <.005      | .09         | <.005       | .05             | <.005           | .01             | <.005          | .05            |
| Physical working conditions        |                    |                 |                     |            |             |             |                 |                 |                 |                |                |
| ● Hours that fit with lifestyle    | .04                | .49             | .01                 | .55        | <.005       | .02         | .49             | .08             | .10             | .38            | .02            |
| Social                             |                    |                 |                     |            |             |             |                 |                 |                 |                |                |
| ● Good interaction with supervisor | .04                | .09             | .06                 | .12        | .37         | .62         | <.005           | .29             | .09             | .20            | .20            |
| ● Respect among ranks              | .05                | .22             | .29                 | .06        | .54         | .26         | .10             | .07             | .21             | .09            | .59            |
| Professional                       |                    |                 |                     |            |             |             |                 |                 |                 |                |                |
| ● Sufficient status                | <.005              | <.005           | .63                 | .03        | .05         | .09         | <.005           | .02             | .06             | .01            | .09            |
| ● Self-esteem from job             | .01                | .19             | <.005               | .05        | .52         | .07         | .04             | .02             | .02             | .04            | .35            |
| Task Requirements                  |                    |                 |                     |            |             |             |                 |                 |                 |                |                |
| ● Adequate help and supplies       | .01                | .12             | .02                 | .01        | .29         | .04         | .03             | .02             | .09             | .14            | .04            |

Numbers for subgroups (for example, full- and part-time workers) do not sum to all nurses because of insufficient detail in work histories for some respondents.

For the statements on job security, interaction with supervisor, and respect among ranks, ratings of BS nurses were significantly different in 2 or fewer of the 10 subgroups. In these cases it is therefore likely that significant differences found in the sample of nurses studied were linked not only with education but also with other nurse and environmental characteristics.

#### Educational and Career Choices

About 73% of the BS graduates indicated they would again choose the same degree program. In contrast, only 29% of the AD nurses and 46% of AD graduates who later received BS degrees indicated they would again choose an AD program.

#### DISCUSSION

This sample of experienced nurses from BS and AD programs rated the importance of various components of job satisfaction similarly. Their perceptions of actual job satisfaction were, however, markedly different. Experienced BS nurses were significantly more satisfied with job security and 7 of the 18 specific satisfaction factors surveyed. In a related study, experienced BS nurses were not significantly less satisfied than experienced elementary teachers and accountants on these same factors except in the areas of salary, chance for administrative participation, and job security (Wright et al., 1990).

As indicated by other studies, no significant difference was found between ratings of all BS and AD nurses for a general job satisfaction statement. Only in the nonhospital subgroup were BS nurses more satisfied generally than AD nurses.

The significant differences appeared when specific components of job satisfaction were compared. BS nurses were more satisfied for statements pertaining to five of the seven job components surveyed, and for both statements related to the professional status component. This study's significant job components are congruent with some, but not all, job characteristics and environmental factors Hinshaw and Atwood (1983) identified from their review of research on nursing job satisfaction. Also, when this study's respondents were subdivided into smaller groups based on characteristics of the nurse and work environment, significant differences between satisfaction of BS and AD nurses persisted.

A comparison of our findings with Knopf's (1983), whose subjects graduated at least 10 years earlier, suggests two possible trends. First, a greater percentage of experienced BS nurses who are working may be working full-time in nursing. Second, fewer AD nurses and more BS nurses would choose the same degree if they were starting over again. This may indicate increasing disillusionment with their educations on the part of experienced AD nurses.

This study found strong differences in job satisfaction associated with differences in educational preparation. Across settings, over time, and with different job responsibilities, experienced BS nurses were more satisfied with many aspects of their jobs than experienced AD nurses. Even without the widespread, formal implementation of two levels of nursing, it may be that a 2-tier system already exists in many

workplaces. Our findings suggest that nurse executives may hire, utilize, and promote BS and AD nurses in different ways.

In 1988, our study found a significantly higher proportion of BS nurses not primarily involved in direct patient care, contrasted with Link's finding that advancement to higher-level positions was similar for BS and AD nurses in 1984. Over time, it may have become increasingly difficult for AD nurses to move into higher-level nursing positions.

Our findings of higher salaries and greater job satisfaction for experienced BS nurses support the economic concept of investment in human capital. Two additional years of nursing education were associated with monetary and nonmonetary returns for the nurses studied.

Conclusions that can be drawn from this study are limited by the study's focus on the work experiences of graduates from a single school and the study's use of an instrument that has not been rigorously tested for validity and reliability. Our findings do, however, suggest several topics for further exploration by nurse researchers, practitioners, and educators.

In research, the specific aspects of job satisfaction compared here need further study. There is also a need for more research on job satisfaction of experienced nurses.

In practice, characteristics of experienced AD nurses who later earn BS degrees offer some intriguing questions for analysis. Although the number of these nurses in our study was small, the finding that a large percentage continued to work in hospitals suggests that support for further education may be a wise investment for employers and students.

In education, our study also revealed educational and salary differentials for nurses not primarily responsible for direct patient care, suggesting that advancement in nursing may be synonymous with a move from the bedside. These findings highlight the importance of policies that expand educational and salary opportunities for experienced nurses who continue to be involved in direct patient care. The lower percentage of AD graduates indicating they would again choose an AD program emphasizes the importance of pre-college career counseling related to the two levels of nursing. Students need to be assisted in making informed career choices before entering a particular degree program.

## References

- American Association of Colleges of Nursing. (1986). Essentials of college and university education for professional nursing: Final report. Washington, DC: Author.
- American Nurses' Association. (1965). Educational preparation for nurse practitioners and assistants to nurses: A position paper. New York: Author.
- American Nurses' Association. (1980). Nursing: A social policy statement. Kansas City, MO: Author.
- American Nurses' Association. (1984). Standards for professional nursing education. Kansas City, MO: Author.
- Bureau of Health Professions. (1990). Seventh report to the President and Congress on the status of health personnel in the United States (DHHS Publication No. HRS-P-OD-90-1). Washington, DC: U.S. Government Printing Office.
- Bureau of the Census. (1984). 1980 census of population, characteristics of the population (Report No. PC80-1-D1-A). Washington, DC: U.S. Government Printing Office.
- Commission on Nursing Education. (1980). Educational preparation for nursing: A source book. Kansas City, MO: American Nurses' Association.
- Council of Associate Degree Programs. (1990). Educational outcomes of associate degree nursing programs: Roles and competencies. New York: National League for Nursing.
- Gray, J. E., Murray, B. L. S., Roy, J. F., & Sawyer, J. R. (1977). Do graduates of technical and professional nursing programs differ in practice? Nursing Research, 26, 368-373.
- Hinshaw, A. S., & Atwood, J. R. (1983). Nursing staff turnover, stress, and satisfaction: Models, measures, and management. Annual Review of Nursing Research, 1, 133-153.
- Johnston, S. C. (1982). The use of the Rines model in differentiating professional and technical nursing practice. Nursing & Health Care, 3, 374-379.
- Larson, E., Lee, P. C., Brown, M. A., & Shorr, J. (1984). Job satisfaction: Assumptions and complexities. Journal of Nursing Administration, 14(1), 31-38.
- Link, C. (1987). What does a BS degree buy? An economist's view. American Journal of Nursing, 87, 1621-1630.
- Munro, B. H. (1983). Job satisfaction among recent graduates of schools of nursing. Nursing Research, 32, 350-355.
- Reichow, R. W., & Scott, K. E. (1976). Study compares graduates of two-, three-, and four-year programs. Hospitals, 50, 95-100.
- Soules, H. M. (1978). Professional advancement and salary differentials among baccalaureate, diploma, and associate degree nurses. Nursing Forum, 2, 184-201.
- Stewart-Dedmon, M. (1988). Job satisfaction of new graduates. Western Journal of Nursing Research, 10(1), 66-72.
- Weisman, C. S., Dear, M. R., Alexander, C. S., & Chase, G. A. (1981). Employment patterns among newly hired hospital staff nurses. Nursing Research, 30, 188-191.
- Wright, V. B., McGill, J., & Collins, J. (1990). Are nurses less satisfied than other workers? Nursing Economics, 8(5), 308-313.